

WEST Search History

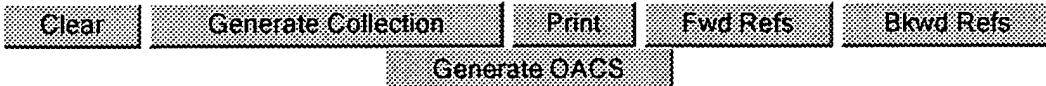
[Hide items](#) [Restore](#) [Clear](#) [Cancel](#)

DATE: Thursday, May 05, 2005

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
		<i>DB=USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L10	(avian myeloblastosis virus adj3 reverse transcriptase or AMV RT or amv reverse transcriptase) and rna-dependent dna polymerase activity and 30000	3
		<i>DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L9	(avian myeloblastosis virus adj3 reverse transcriptase or AMV RT or amv reverse transcriptase) and rna-dependent dna polymerase activity and 30000	7
<input type="checkbox"/>	L8	L7 and rna-dependent DNA polymerase activity	11
<input type="checkbox"/>	L7	(avian myeloblastosis virus adj3 reverse transcriptase or AMV RT or amv reverse transcriptase) and subunit and eukaryot\$3	328
		<i>DB=USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L6	L5 and rna-dependent dna adj3 polymerase activity	9
<input type="checkbox"/>	L5	l3 and eukaryot\$4	527
<input type="checkbox"/>	L4	L3 and (nucleic acid encoding adj3 transcriptase or nucleic acid encoding adj3 amv rt)	1
<input type="checkbox"/>	L3	(avian myeloblastosis virus adj3 reverse transcriptase or AMV RT or amv reverse transcriptase) and subunit and eukaryot\$3	527
<input type="checkbox"/>	L2	(avian myeloblastosis virus adj3 reverse transcriptase or AMV RT or amv reverse transcriptase) same subunit same eukaryot\$3	0
<input type="checkbox"/>	L1	(avian myeloblastosis virus reverse transcriptase or AMV RT or amv reverse transcriptase) same subunit same eukaryot\$5	0

END OF SEARCH HISTORY

Hit List



Search Results - Record(s) 1 through 11 of 11 returned.

1. Document ID: US 20050009028 A1

L8: Entry 1 of 11

File: PGPB

Jan 13, 2005

PGPUB-DOCUMENT-NUMBER: 20050009028
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050009028 A1

TITLE: Method for isolating cell-type specific mrnas

PUBLICATION-DATE: January 13, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Heintz, Nathaniel	Pelham Manor	NY	US	
Serafini, Tito A.	San Mateo	CA	US	
Shyjan, Andrew W.	San Carlos	CA	US	

US-CL-CURRENT: 435/6; 435/270, 435/91.1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KIN/C](#) | [Drawn Obj](#)

2. Document ID: US 20040209276 A1

L8: Entry 2 of 11

File: PGPB

Oct 21, 2004

PGPUB-DOCUMENT-NUMBER: 20040209276
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040209276 A1

TITLE: Thermostable reverse transcriptases and uses thereof

PUBLICATION-DATE: October 21, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Smith, Michael D.	Rockville	MD	US	
Potter, Robert Jason	San Marcos	CA	US	
Dhariwal, Gulshan	Potomac	MD	US	
Gerard, Gary F.	Frederick	MD	US	
Rosenthal, Kim	Laytonsville	MD	US	
Lee, Jun E.	San Diego	CA	US	

US-CL-CURRENT: 435/6; 435/199, 435/252.3, 435/320.1, 435/69.1, 435/91.2, 536/23.2[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#)

3. Document ID: US 20040171041 A1

L8: Entry 3 of 11

File: PGPB

Sep 2, 2004

PGPUB-DOCUMENT-NUMBER: 20040171041

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040171041 A1

TITLE: Preparation and use of single-stranded transcription substrates for synthesis of transcription products corresponding to target sequences

PUBLICATION-DATE: September 2, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Dahl, Gary A.	Madison	WI	US	
Jendrisak, Jerome J.	Madison	WI	US	
Davydova, Elena K.	Chicago	IL	US	
Rothman-Denes, Lucia B.	Chicago	IL	US	
Gerdes, Svetlana Y.	Madison	WI	US	

US-CL-CURRENT: 435/6; 435/91.2[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#)

4. Document ID: US 20040126770 A1

L8: Entry 4 of 11

File: PGPB

Jul 1, 2004

PGPUB-DOCUMENT-NUMBER: 20040126770

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040126770 A1

TITLE: Rolling circle amplification of RNA

PUBLICATION-DATE: July 1, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kumar, Gyanendra	Guilford	CT	US	
Abarzua, Patricio	West Caldwell	NJ	US	

US-CL-CURRENT: 435/6; 435/91.2[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#)

5. Document ID: US 20040014105 A1

L8: Entry 5 of 11

File: PGPB

Jan 22, 2004

PGPUB-DOCUMENT-NUMBER: 20040014105

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040014105 A1

TITLE: Methods for the enrichment of low-abundance polynucleotides

PUBLICATION-DATE: January 22, 2004

INVENTOR- INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Schroeder, Benjamin G.	San Mateo	CA	US	
Chen, Caifu	Palo Alto	CA	US	
Schroth, Gary P.	San Ramon	CA	US	

US-CL-CURRENT: 435/6; 435/91.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KINIC](#) | [Drawn D](#)

6. Document ID: US 20030211483 A1

L8: Entry 6 of 11

File: PGPB

Nov 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030211483

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030211483 A1

TITLE: Methods for the enrichment of low-abundance polynucleotides

PUBLICATION-DATE: November 13, 2003

INVENTOR- INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Schroeder, Benjamin G.	San Mateo	CA	US	
Chen, Caifu	Palo Alto	CA	US	
Schroth, Gary P.	San Ramon	CA	US	

US-CL-CURRENT: 435/6; 435/91.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KINIC](#) | [Drawn D](#)

7. Document ID: US 20030198944 A1

L8: Entry 7 of 11

File: PGPB

Oct 23, 2003

PGPUB-DOCUMENT-NUMBER: 20030198944

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030198944 A1

TITLE: Compositions and methods for reverse transcription of nucleic acid molecules

PUBLICATION-DATE: October 23, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gerard, Gary F.	Frederick	MD	US	
Smith, Michael D.	Rockville	MD	US	
Chatterjee, Deb K.	North Potomac	MD	US	

US-CL-CURRENT: 435/5; 435/199, 435/6, 435/91.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KUDC](#) | [Drawn D](#)

8. Document ID: US 20030186270 A1

L8: Entry 8 of 11

File: PGPB

Oct 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030186270

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030186270 A1

TITLE: Compositions and methods for reverse transcription of nucleic acid molecules

PUBLICATION-DATE: October 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gerard, Gary F.	Frederick	MD	US	
Smith, Michael D.	Rockville	MD	US	
Chatterjee, Deb K.	North Potomac	MD	US	

US-CL-CURRENT: 435/6; 435/199, 435/91.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KUDC](#) | [Drawn D](#)

9. Document ID: US 20030032086 A1

L8: Entry 9 of 11

File: PGPB

Feb 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030032086

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030032086 A1

TITLE: COMPOSITIONS AND METHODS FOR REVERSE TRANSCRIPTION OF NUCLEIC ACID MOLECULES

PUBLICATION-DATE: February 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
GERARD, GARY F.	FREDERICK	MD	US	
SMITH, MICHAEL D.	ROCKVILLE	MD	US	
CHATTERJEE, DEB K.	NORTH POTOMAC	MD	US	

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 435/325, 435/6, 435/68.1, 435/91.2,
530/350, 536/23.1, 536/23.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWC](#) | [Drawn D](#)

10. Document ID: US 20030008282 A1

L8: Entry 10 of 11

File: PGPB

Jan 9, 2003

PGPUB-DOCUMENT-NUMBER: 20030008282

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030008282 A1

TITLE: Compositions and methods for determining anti-viral drug susceptibility and resistance and anti-viral drug screening

PUBLICATION-DATE: January 9, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Capon, Daniel J.	Hillsborough	CA	US	
Petropoulos, Christos J.	Half Moon Bay	CA	US	

US-CL-CURRENT: 435/6; 435/320.1, 435/5

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWC](#) | [Drawn D](#)

11. Document ID: US 20020081581 A1

L8: Entry 11 of 11

File: PGPB

Jun 27, 2002

PGPUB-DOCUMENT-NUMBER: 20020081581

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020081581 A1

TITLE: COMPOSITIONS AND METHODS FOR REVERSE TRANSCRIPTION OF NUCLEIC ACID MOLECULES

PUBLICATION-DATE: June 27, 2002

INVENTOR-INFORMATION:

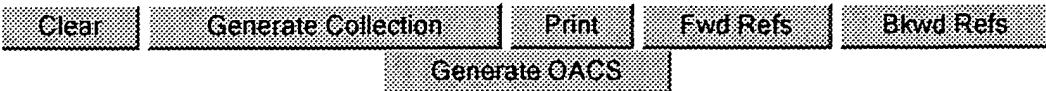
NAME	CITY	STATE	COUNTRY	RULE-47
GERARD, GARY F.	FREDERICK	MD	US	
SMITH, MICHAEL D.	ROCKVILLE	MD	US	
CHATTERJEE, DEB K.	NORTH POTOMAC	MD	US	

US-CL-CURRENT: 435/6; 435/91.2[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#)[Clear](#) | [Generate Collection](#) | [Print](#) | [Fwd Refs](#) | [Bkwd Refs](#) | [Generate CACS](#)

Terms	Documents
L7 and rna-dependent DNA polymerase activity	11

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1. Document ID: US 6835561 B1

Using default format because multiple data bases are involved.

L6: Entry 1 of 9

File: USPT

Dec 28, 2004

US-PAT-NO: 6835561

DOCUMENT-IDENTIFIER: US 6835561 B1

TITLE: Composition of reverse transcriptases and mutants thereof

DATE-ISSUED: December 28, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gerard; Gary F.	Frederick	MD		
Smith; Michael D.	Rockville	MD		
Chatterjee; Deb K.	North Potomac	MD		

US-CL-CURRENT: 435/194; 435/193



2. Document ID: US 6821726 B1

L6: Entry 2 of 9

File: USPT

Nov 23, 2004

US-PAT-NO: 6821726

DOCUMENT-IDENTIFIER: US 6821726 B1

TITLE: Method for quantitatively analyzing tumor cells in a body fluid and test kits suited therefor

DATE-ISSUED: November 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dahm; Michael W.	D-81677 Munchen			DE
Phelps; Robert C.	85757 Karlsfeld			DE
Brockmeyer; Carsten	D-85354 Freising			DE

US-CL-CURRENT: 435/6; 435/91.1, 435/91.2, 536/23.1, 536/24.3

ABSTRACT:

The invention relates to a method for quantitatively analyzing tumor cells in a body fluid. According to the inventive method, the test sample to be examined is first subjected to a method for accumulating or depleting tumor cells, and a reaction is carried out on the accumulated or depleted tumor cells. During the reaction, the mRNA which codes for the catalytic subunit of the telomerase is specifically amplified, and afterwards, the quantity of amplified nucleic acid is quantitatively analyzed. The invention also relates to test kits suited for the invented method.

50 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 12

Full	Title	Citation	Front	Review	Classification	Date	Reference				Claims	KWC	Drawn D.
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3. Document ID: US 6610522 B1

L6: Entry 3 of 9

File: USPT

Aug 26, 2003

US-PAT-NO: 6610522

DOCUMENT-IDENTIFIER: US 6610522 B1

**** See image for Certificate of Correction ****

TITLE: Cloned genes encoding reverse transcriptase lacking RNase H activity

DATE-ISSUED: August 26, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael Leslie	Columbia	MD		
Gerard; Gary Floyd	Frederick	MD		

US-CL-CURRENT: 435/194; 435/252.3, 435/252.33, 435/320.1, 435/471, 435/69.1,
435/91.1, 435/91.2, 536/23.2

ABSTRACT:

The invention relates to a gene which encodes reverse transcriptase having DNA polymerase activity and substantially no RNase H activity. The invention also relates to vectors containing the gene and hosts transformed with the vectors of the invention. The invention also relates to a method of producing reverse transcriptase having DNA polymerase activity and substantially no RNase H activity by expressing the reverse transcriptase genes of the present invention in a host. The invention also relates to a method of producing cDNA from mRNA using the reverse transcriptase of the invention. The invention also relates to a kit for the preparation of cDNA from mRNA comprising the reverse transcriptase of the invention.

98 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Drawn D.
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 4. Document ID: US 6589768 B1

L6: Entry 4 of 9

File: USPT

Jul 8, 2003

US-PAT-NO: 6589768

DOCUMENT-IDENTIFIER: US 6589768 B1

** See image for Certificate of Correction **

TITLE: Cloned genes encoding reverse transcriptase lacking RNase H activity

DATE-ISSUED: July 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael Leslie	Columbia	MD		
Gerard; Gary Floyd	Frederick	MD		

US-CL-CURRENT: 435/194; 435/252.3, 435/320.1, 435/471, 435/91.1, 435/91.2

ABSTRACT:

The invention relates to a gene which encodes reverse transcriptase having DNA polymerase activity and substantially no RNase H activity. The invention also relates to vectors containing the gene and hosts transformed with the vectors of the invention. The invention also relates to a method of producing reverse transcriptase having DNA polymerase activity and substantially no RNase H activity by expressing the reverse transcriptase genes of the present invention in a host. The invention also relates to a method of producing cDNA from mRNA using the reverse transcriptase of the invention. The invention also relates to a kit for the preparation of cDNA from mRNA comprising the reverse transcriptase of the invention.

196 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Drawn D.
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 5. Document ID: US 6582904 B2

L6: Entry 5 of 9

File: USPT

Jun 24, 2003

US-PAT-NO: 6582904

DOCUMENT-IDENTIFIER: US 6582904 B2

** See image for Certificate of Correction **

TITLE: Method of quantifying tumour cells in a body fluid and a suitable test kit

DATE-ISSUED: June 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dahm; Michael W.	D-81677 Munich			DE

US-CL-CURRENT: 435/6; 435/194, 435/91.2, 536/23.1, 536/24.3, 536/24.33

ABSTRACT:

A method for the quantification of tumor cells in a body fluid is disclosed and entails first carrying out a reaction with the sample to be investigated, in which the RNA component of telomerase is specifically amplified, and then the amount of amplified nucleic acid is determined quantitatively, as are test kits suitable therefor.

33 Claims, 11 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 11

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KMC](#) | [Drawn](#) | [De](#)

6. Document ID: US 6518019 B2

L6: Entry 6 of 9

File: USPT

Feb 11, 2003

US-PAT-NO: 6518019

DOCUMENT-IDENTIFIER: US 6518019 B2

TITLE: Compositions and methods for reverse transcription of nucleic acid molecules

DATE-ISSUED: February 11, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gerard; Gary F.	Frederick	MD		
Smith; Michael D.	Rockville	MD		
Chatterjee; Deb K.	North Potomac	MD		

US-CL-CURRENT: 435/6; 435/91.1, 435/91.2

ABSTRACT:

The present invention is generally related to compositions and methods for the reverse transcription of nucleic acid molecules, especially messenger RNA molecules. Specifically, the invention relates to compositions comprising mixtures of polypeptides having reverse transcriptase (RT) activity, and to methods of producing, amplifying or sequencing nucleic acid molecules (particularly cDNA molecules) using these compositions or polypeptides, particularly at temperatures about 55.degree. C. The invention also relates to nucleic acid molecules produced by these methods, to vectors and host cells comprising these nucleic acid molecules, and to the use of such nucleic acid molecules to produce desired

polypeptides. The invention also relates to methods for producing Rous Sarcoma Virus (RSV) and Avian Myeloblastosis Virus (AMV) RTs or other Avian Sarcoma-Leukosis Virus (ASLV) RTs (.alpha. and/or .beta. subunits thereof), to isolated nucleic acid molecules encoding such RSV RT, AMV RT or other ASLV RT subunits, to vectors and host cells comprising these isolated nucleic acid molecules and to RSV RT, AMV RT and other ASLV RT subunits produced by these methods. The invention further relates to nucleic acid molecules encoding recombinant heterodimeric RT holoenzymes, particularly heterodimeric RSV RTs, AMV RTs or other ASLV RTs (which may be .alpha..beta. RTs, .beta..alpha. RTs, or .alpha. RTs), vectors (particularly baculovirus vectors) and host cells (particularly insect and yeast cells) comprising these nucleic acid molecules, methods for producing these heterodimeric RTs and heterodimeric RTs produced by these methods. The invention also relates to kits comprising the compositions, polypeptides, or RSV RTs, AMV RTs or other ASLV RTs of the invention.

116 Claims, 60 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 53

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Claims](#) | [KWRIC](#) | [Drawn D](#)

7. Document ID: US 6271004 B1

L6: Entry 7 of 9

File: USPT

Aug 7, 2001

US-PAT-NO: 6271004

DOCUMENT-IDENTIFIER: US 6271004 B1

**** See image for Certificate of Correction ****

TITLE: Method for improved reverse transcription at high temperatures

DATE-ISSUED: August 7, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Warthoe, Peter	Copenhagen			DK

US-CL-CURRENT: 435/91.51; 435/6, 435/91.1, 435/91.2, 435/91.5

ABSTRACT:

The invention relates to a method for enzyme stabilization. A method for improved reverse transcription at high temperatures is provided, wherein a thermostable heat shock protein (HSPs) stabilizes a reverse transcriptase, as well as reduces the RNase H activity of said reverse transcriptase. The present invention thus relates to a stabilizing agent, that prevents thermal denaturing and enhances thermostability of a reverse transcriptase. The invention further relates to a method of producing a polypeptide complex consisting of a Chaperonin and a Moloney murine leukemia virus (MMVL) reverse transcriptase, characterized by having enhanced thermostability as well as reduced RNase H activity, compared to a (MMVL) reverse transcriptase alone. The invention further relates to a kit for the preparation of cDNA from mRNA, comprising either both stabilizing agent and reverse transcriptase or the polypeptide complex of the invention.

39 Claims, 10 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

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8. Document ID: US 6063608 A

L6: Entry 8 of 9

File: USPT

May 16, 2000

US-PAT-NO: 6063608

DOCUMENT-IDENTIFIER: US 6063608 A

**** See image for Certificate of Correction ****

TITLE: Cloned genes encoding reverse transcriptase lacking RNase H activity

DATE-ISSUED: May 16, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael Leslie	Columbia	MD		
Gerard; Gary Floyd	Frederick	MD		

US-CL-CURRENT: 435/194; 435/252.3, 435/252.33, 435/320.1, 435/475, 435/69.1,
435/91.1, 435/91.2, 435/975, 536/23.2

ABSTRACT:

The invention relates to a gene which encodes reverse transcriptase having DNA polymerase activity and substantially no RNase H activity. The invention also relates to vectors containing the gene and hosts transformed with the vectors of the invention. The invention also relates to a method of producing reverse transcriptase having DNA polymerase activity and substantially no RNase H activity by expressing the reverse transcriptase genes of the present invention in a host. The invention also relates to a method of producing cDNA from mRNA using the reverse transcriptase of the invention. The invention also relates to a kit for the preparation of cDNA from mRNA comprising the reverse transcriptase of the invention.

196 Claims, 6 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 8

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9. Document ID: US 5837464 A

L6: Entry 9 of 9

File: USPT

Nov 17, 1998

US-PAT-NO: 5837464

DOCUMENT-IDENTIFIER: US 5837464 A

** See image for Certificate of Correction **

TITLE: Compositions and methods for determining anti-viral drug susceptibility and resistance and anti-viral drug screening

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Capon; Daniel	Hillsborough	CA		
Petropoulos; Christos J.	Half Moon Bay	CA		

US-CL-CURRENT: 435/6; 435/320.1, 435/369

ABSTRACT:

This invention provides a method for determining susceptibility for an anti-viral drug comprising: (a) introducing a resistance test vector comprising a patient-derived segment and an indicator gene into a host cell; (b) culturing the host cell from (a); (c) measuring expression of the indicator gene in a target host cell; and (d) comparing the expression of the indicator gene from (c) with the expression of the indicator gene measured when steps (a)-(c) are carried out in the absence of the anti-viral drug, wherein a test concentration of the anti-viral drug is present at steps (a)-(c); at steps (b)-(c); or at step (c). This invention also provides a method for determining anti-viral drug resistance in a patient comprising: (a) determining anti-viral drug susceptibility in the patient at a first time using the susceptibility test described above, wherein the patient-derived segment is obtained from the patient at about said time; (b) determining anti-viral drug susceptibility of the same patient at a later time; and (c) comparing the anti-viral drug susceptibilities determined in step (a) and (b), wherein a decrease in anti-viral drug susceptibility at the later time compared to the first time indicates development or progression of anti-viral drug resistance in the patient. This invention also provides a method for evaluating the biological effectiveness of a candidate anti-viral drug compound. Compositions including resistance test vectors comprising a patient-derived segment and an indicator gene and host cells transformed with the resistance test vectors are provided.

83 Claims, 67 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 23

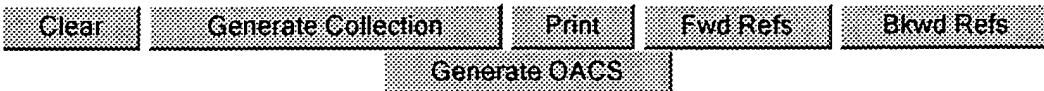
[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KOMC](#) | [Draw. Ds](#)

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Terms	Documents
L5 and rna-dependent dna adj3 polymerase activity	9

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Search Results - Record(s) 1 through 7 of 7 returned.

1. Document ID: US 20040209276 A1

L9: Entry 1 of 7

File: PGPB

Oct 21, 2004

PGPUB-DOCUMENT-NUMBER: 20040209276
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040209276 A1

TITLE: Thermostable reverse transcriptases and uses thereof

PUBLICATION-DATE: October 21, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Smith, Michael D.	Rockville	MD	US	
Potter, Robert Jason	San Marcos	CA	US	
Dhariwal, Gulshan	Potomac	MD	US	
Gerard, Gary F.	Frederick	MD	US	
Rosenthal, Kim	Laytonsville	MD	US	
Lee, Jun E.	San Diego	CA	US	

US-CL-CURRENT: 435/6; 435/199, 435/252.3, 435/320.1, 435/69.1, 435/91.2, 536/23.2



2. Document ID: US 20040171041 A1

L9: Entry 2 of 7

File: PGPB

Sep 2, 2004

PGPUB-DOCUMENT-NUMBER: 20040171041
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040171041 A1

TITLE: Preparation and use of single-stranded transcription substrates for synthesis of transcription products corresponding to target sequences

PUBLICATION-DATE: September 2, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Dahl, Gary A.	Madison	WI	US	
Jendrisak, Jerome J.	Madison	WI	US	

Davydova, Elena K.	Chicago	IL	US
Rothman-Denes, Lucia B.	Chicago	IL	US
Gerdes, Svetlana Y.	Madison	WI	US

US-CL-CURRENT: 435/6; 435/91.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWC](#) | [Drawn D](#)

3. Document ID: US 20040081978 A1

L9: Entry 3 of 7

File: PGPB

Apr 29, 2004

PGPUB-DOCUMENT-NUMBER: 20040081978

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040081978 A1

TITLE: Random-primed reverse transcriptase-in vitro transcription method for rna amplification

PUBLICATION-DATE: April 29, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ziman, Michael	San Francisco	CA	US	
Davis, Collen P.	Seattle	WA	US	

US-CL-CURRENT: 435/6; 435/91.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWC](#) | [Drawn D](#)

4. Document ID: US 20030198944 A1

L9: Entry 4 of 7

File: PGPB

Oct 23, 2003

PGPUB-DOCUMENT-NUMBER: 20030198944

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030198944 A1

TITLE: Compositions and methods for reverse transcription of nucleic acid molecules

PUBLICATION-DATE: October 23, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gerard, Gary F.	Frederick	MD	US	
Smith, Michael D.	Rockville	MD	US	
Chatterjee, Deb K.	North Potomac	MD	US	

US-CL-CURRENT: 435/5; 435/199, 435/6, 435/91.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Drawn D.
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□ 5. Document ID: US 20030186270 A1

L9: Entry 5 of 7

File: PGPB

Oct 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030186270

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030186270 A1

TITLE: Compositions and methods for reverse transcription of nucleic acid molecules

PUBLICATION-DATE: October 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gerard, Gary F.	Frederick	MD	US	
Smith, Michael D.	Rockville	MD	US	
Chatterjee, Deb K.	North Potomac	MD	US	

US-CL-CURRENT: 435/6; 435/199, 435/91.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Drawn D.
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□ 6. Document ID: US 20030032086 A1

L9: Entry 6 of 7

File: PGPB

Feb 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030032086

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030032086 A1

TITLE: COMPOSITIONS AND METHODS FOR REVERSE TRANSCRIPTION OF NUCLEIC ACID MOLECULES

PUBLICATION-DATE: February 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
GERARD, GARY F.	FREDERICK	MD	US	
SMITH, MICHAEL D.	ROCKVILLE	MD	US	
CHATTERJEE, DEB K.	NORTH POTOMAC	MD	US	

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 435/325, 435/6, 435/68.1, 435/91.2,
530/350, 536/23.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Drawn D.
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□ 7. Document ID: US 20020081581 A1

L9: Entry 7 of 7

File: PGPB

Jun 27, 2002

PGPUB-DOCUMENT-NUMBER: 20020081581
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020081581 A1

TITLE: COMPOSITIONS AND METHODS FOR REVERSE TRANSCRIPTION OF NUCLEIC ACID MOLECULES

PUBLICATION-DATE: June 27, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
GERARD, GARY F.	FREDERICK	MD	US	
SMITH, MICHAEL D.	ROCKVILLE	MD	US	
CHATTERJEE, DEB K.	NORTH POTOMAC	MD	US	

US-CL-CURRENT: 435/6; 435/91.2[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KINAC](#) | [Drawn D](#)[Clear](#) | [Generate Collection](#) | [Print](#) | [Fwd Refs](#) | [Bkwd Refs](#) | [Generate OACS](#)

Terms	Documents
(avian myeloblastosis virus adj3 reverse transcriptase or AMV RT or amv reverse transcriptase) and rna-dependent dna polymerase activity and 30000	7

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1. Document ID: US 6835561 B1

Using default format because multiple data bases are involved.

L6: Entry 1 of 9

File: USPT

Dec 28, 2004

US-PAT-NO: 6835561

DOCUMENT-IDENTIFIER: US 6835561 B1

TITLE: Composition of reverse transcriptases and mutants thereof

DATE-ISSUED: December 28, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gerard; Gary F.	Frederick	MD		
Smith; Michael D.	Rockville	MD		
Chatterjee; Deb K.	North Potomac	MD		

US-CL-CURRENT: 435/194; 435/193

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC	Drawn D
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2. Document ID: US 6821726 B1

L6: Entry 2 of 9

File: USPT

Nov 23, 2004

US-PAT-NO: 6821726

DOCUMENT-IDENTIFIER: US 6821726 B1

TITLE: Method for quantitatively analyzing tumor cells in a body fluid and test kits suited therefor

DATE-ISSUED: November 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dahm; Michael W.	D-81677 Munchen			DE
Phelps; Robert C.	85757 Karlsfeld			DE
Brockmeyer; Carsten	D-85354 Freising			DE

US-CL-CURRENT: 435/6; 435/91.1, 435/91.2, 536/23.1, 536/24.3

ABSTRACT:

The invention relates to a method for quantitatively analyzing tumor cells in a body fluid. According to the inventive method, the test sample to be examined is first subjected to a method for accumulating or depleting tumor cells, and a reaction is carried out on the accumulated or depleted tumor cells. During the reaction, the mRNA which codes for the catalytic subunit of the telomerase is specifically amplified, and afterwards, the quantity of amplified nucleic acid is quantitatively analyzed. The invention also relates to test kits suited for the invented method.

50 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 12

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KINIC	Draw. D.
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3. Document ID: US 6610522 B1

L6: Entry 3 of 9

File: USPT

Aug 26, 2003

US-PAT-NO: 6610522

DOCUMENT-IDENTIFIER: US 6610522 B1

**** See image for Certificate of Correction ****

TITLE: Cloned genes encoding reverse transcriptase lacking RNase H activity

DATE-ISSUED: August 26, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael Leslie	Columbia	MD		
Gerard; Gary Floyd	Frederick	MD		

US-CL-CURRENT: 435/194; 435/252.3, 435/252.33, 435/320.1, 435/471, 435/69.1,
435/91.1, 435/91.2, 536/23.2

ABSTRACT:

The invention relates to a gene which encodes reverse transcriptase having DNA polymerase activity and substantially no RNase H activity. The invention also relates to vectors containing the gene and hosts transformed with the vectors of the invention. The invention also relates to a method of producing reverse transcriptase having DNA polymerase activity and substantially no RNase H activity by expressing the reverse transcriptase genes of the present invention in a host. The invention also relates to a method of producing cDNA from mRNA using the reverse transcriptase of the invention. The invention also relates to a kit for the preparation of cDNA from mRNA comprising the reverse transcriptase of the invention.

98 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Drawn D.
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 4. Document ID: US 6589768 B1

L6: Entry 4 of 9

File: USPT

Jul 8, 2003

US-PAT-NO: 6589768

DOCUMENT-IDENTIFIER: US 6589768 B1

** See image for Certificate of Correction **

TITLE: Cloned genes encoding reverse transcriptase lacking RNase H activity

DATE-ISSUED: July 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael Leslie	Columbia	MD		
Gerard; Gary Floyd	Frederick	MD		

US-CL-CURRENT: 435/194; 435/252.3; 435/320.1; 435/471; 435/91.1; 435/91.2

ABSTRACT:

The invention relates to a gene which encodes reverse transcriptase having DNA polymerase activity and substantially no RNase H activity. The invention also relates to vectors containing the gene and hosts transformed with the vectors of the invention. The invention also relates to a method of producing reverse transcriptase having DNA polymerase activity and substantially no RNase H activity by expressing the reverse transcriptase genes of the present invention in a host. The invention also relates to a method of producing cDNA from mRNA using the reverse transcriptase of the invention. The invention also relates to a kit for the preparation of cDNA from mRNA comprising the reverse transcriptase of the invention.

196 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Drawn D.
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 5. Document ID: US 6582904 B2

L6: Entry 5 of 9

File: USPT

Jun 24, 2003

US-PAT-NO: 6582904

DOCUMENT-IDENTIFIER: US 6582904 B2

** See image for Certificate of Correction **

TITLE: Method of quantifying tumour cells in a body fluid and a suitable test kit

DATE-ISSUED: June 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dahm; Michael W.	D-81677 Munich			DE

US-CL-CURRENT: 435/6; 435/194, 435/91.2, 536/23.1, 536/24.3, 536/24.33

ABSTRACT:

A method for the quantification of tumor cells in a body fluid is disclosed and entails first carrying out a reaction with the sample to be investigated, in which the RNA component of telomerase is specifically amplified, and then the amount of amplified nucleic acid is determined quantitatively, as are test kits suitable therefor.

33 Claims, 11 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 11

Full | Title | Citation | Front | Review | Classification | Date | Reference |  | Claims | KWMC | Draw. D.

6. Document ID: US 6518019 B2

L6: Entry 6 of 9

File: USPT

Feb 11, 2003

US-PAT-NO: 6518019

DOCUMENT-IDENTIFIER: US 6518019 B2

TITLE: Compositions and methods for reverse transcription of nucleic acid molecules

DATE-ISSUED: February 11, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gerard; Gary F.	Frederick	MD		
Smith; Michael D.	Rockville	MD		
Chatterjee; Deb K.	North Potomac	MD		

US-CL-CURRENT: 435/6; 435/91.1, 435/91.2

ABSTRACT:

The present invention is generally related to compositions and methods for the reverse transcription of nucleic acid molecules, especially messenger RNA molecules. Specifically, the invention relates to compositions comprising mixtures of polypeptides having reverse transcriptase (RT) activity, and to methods of producing, amplifying or sequencing nucleic acid molecules (particularly cDNA molecules) using these compositions or polypeptides, particularly at temperatures about 55.degree. C. The invention also relates to nucleic acid molecules produced by these methods, to vectors and host cells comprising these nucleic acid molecules, and to the use of such nucleic acid molecules to produce desired

polypeptides. The invention also relates to methods for producing Rous Sarcoma Virus (RSV) and Avian Myeloblastosis Virus (AMV) RTs or other Avian Sarcoma-Leukosis Virus (ASLV) RTs (.alpha. and/or .beta. subunits thereof), to isolated nucleic acid molecules encoding such RSV RT, AMV RT or other ASLV RT subunits, to vectors and host cells comprising these isolated nucleic acid molecules and to RSV RT, AMV RT and other ASLV RT subunits produced by these methods. The invention further relates to nucleic acid molecules encoding recombinant heterodimeric RT holoenzymes, particularly heterodimeric RSV RTs, AMV RTs or other ASLV RTs (which may be .alpha..beta. RTs, .beta..beta. RTs, or .alpha. RTs), vectors (particularly baculovirus vectors) and host cells (particularly insect and yeast cells) comprising these nucleic acid molecules, methods for producing these heterodimeric RTs and heterodimeric RTs produced by these methods. The invention also relates to kits comprising the compositions, polypeptides, or RSV RTs, AMV RTs or other ASLV RTs of the invention.

116 Claims, 60 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 53

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Help](#) | [Claims](#) | [KIND](#) | [Drawn D](#)

7. Document ID: US 6271004 B1

L6: Entry 7 of 9

File: USPT

Aug 7, 2001

US-PAT-NO: 6271004

DOCUMENT-IDENTIFIER: US 6271004 B1

**** See image for Certificate of Correction ****

TITLE: Method for improved reverse transcription at high temperatures

DATE-ISSUED: August 7, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Warthoe; Peter	Copenhagen			DK

US-CL-CURRENT: 435/91.51; 435/6, 435/91.1, 435/91.2, 435/91.5

ABSTRACT:

The invention relates to a method for enzyme stabilization. A method for improved reverse transcription at high temperatures is provided, wherein a thermostable heat shock protein (HSPs) stabilizes a reverse transcriptase, as well as reduces the RNase H activity of said reverse transcriptase. The present invention thus relates to a stabilizing agent, that prevents thermal denaturing and enhances thermostability of a reverse transcriptase. The invention further relates to a method of producing a polypeptide complex consisting of a Chaperonin and a Moloney murine leukemia virus (MMVL) reverse transcriptase, characterized by having enhanced thermostability as well as reduced RNase H activity, compared to a (MMVL) reverse transcriptase alone. The invention further relates to a kit for the preparation of cDNA from mRNA, comprising either both stabilizing agent and reverse transcriptase or the polypeptide complex of the invention.

39 Claims, 10 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KINAC | Drawn D...

8. Document ID: US 6063608 A

L6: Entry 8 of 9

File: USPT

May 16, 2000

US-PAT-NO: 6063608
DOCUMENT-IDENTIFIER: US 6063608 A
** See image for Certificate of Correction **

TITLE: Cloned genes encoding reverse transcriptase lacking RNase H activity

DATE-ISSUED: May 16, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael Leslie	Columbia	MD		
Gerard; Gary Floyd	Frederick	MD		

US-CL-CURRENT: 435/194; 435/252.3, 435/252.33, 435/320.1, 435/475, 435/69.1,
435/91.1, 435/91.2, 435/975, 536/23.2

ABSTRACT:

The invention relates to a gene which encodes reverse transcriptase having DNA polymerase activity and substantially no RNase H activity. The invention also relates to vectors containing the gene and hosts transformed with the vectors of the invention. The invention also relates to a method of producing reverse transcriptase having DNA polymerase activity and substantially no RNase H activity by expressing the reverse transcriptase genes of the present invention in a host. The invention also relates to a method of producing cDNA from mRNA using the reverse transcriptase of the invention. The invention also relates to a kit for the preparation of cDNA from mRNA comprising the reverse transcriptase of the invention.

196 Claims, 6 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 8

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KINAC | Drawn D...

9. Document ID: US 5837464 A

L6: Entry 9 of 9

File: USPT

Nov 17, 1998

US-PAT-NO: 5837464
DOCUMENT-IDENTIFIER: US 5837464 A

** See image for Certificate of Correction **

TITLE: Compositions and methods for determining anti-viral drug susceptibility and resistance and anti-viral drug screening

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Capon; Daniel	Hillsborough	CA		
Petropoulos; Christos J.	Half Moon Bay	CA		

US-CL-CURRENT: 435/6; 435/320.1, 435/369

ABSTRACT:

This invention provides a method for determining susceptibility for an anti-viral drug comprising: (a) introducing a resistance test vector comprising a patient-derived segment and an indicator gene into a host cell; (b) culturing the host cell from (a); (c) measuring expression of the indicator gene in a target host cell; and (d) comparing the expression of the indicator gene from (c) with the expression of the indicator gene measured when steps (a)-(c) are carried out in the absence of the anti-viral drug, wherein a test concentration of the anti-viral drug is present at steps (a)-(c); at steps (b)-(c); or at step (c). This invention also provides a method for determining anti-viral drug resistance in a patient comprising: (a) determining anti-viral drug susceptibility in the patient at a first time using the susceptibility test described above, wherein the patient-derived segment is obtained from the patient at about said time; (b) determining anti-viral drug susceptibility of the same patient at a later time; and (c) comparing the anti-viral drug susceptibilities determined in step (a) and (b), wherein a decrease in anti-viral drug susceptibility at the later time compared to the first time indicates development or progression of anti-viral drug resistance in the patient. This invention also provides a method for evaluating the biological effectiveness of a candidate anti-viral drug compound. Compositions including resistance test vectors comprising a patient-derived segment and an indicator gene and host cells transformed with the resistance test vectors are provided.

83 Claims, 67 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 23

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KNC](#) | [Drawn](#) | [D](#)

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Terms	Documents
L5 and rna-dependent dna adj3 polymerase activity	9

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1. Document ID: US 6835561 B1

Using default format because multiple data bases are involved.

L11: Entry 1 of 3

File: USPT

Dec 28, 2004

US-PAT-NO: 6835561

DOCUMENT-IDENTIFIER: US 6835561 B1

TITLE: Composition of reverse transcriptases and mutants thereof

DATE-ISSUED: December 28, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gerard; Gary F.	Frederick	MD		
Smith; Michael D.	Rockville	MD		
Chatterjee; Deb K.	North Potomac	MD		

US-CL-CURRENT: 435/194; 435/193

Full	Title	Citation	Faint	Review	Classification	Date	Reference	Claims	KuMC	Drawn	Da
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2. Document ID: US 6518019 B2

L11: Entry 2 of 3

File: USPT

Feb 11, 2003

US-PAT-NO: 6518019

DOCUMENT-IDENTIFIER: US 6518019 B2

TITLE: Compositions and methods for reverse transcription of nucleic acid molecules

DATE-ISSUED: February 11, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gerard; Gary F.	Frederick	MD		
Smith; Michael D.	Rockville	MD		
Chatterjee; Deb K.	North Potomac	MD		

US-CL-CURRENT: 435/6; 435/91.1, 435/91.2

ABSTRACT:

The present invention is generally related to compositions and methods for the reverse transcription of nucleic acid molecules, especially messenger RNA molecules. Specifically, the invention relates to compositions comprising mixtures of polypeptides having reverse transcriptase (RT) activity, and to methods of producing, amplifying or sequencing nucleic acid molecules (particularly cDNA molecules) using these compositions or polypeptides, particularly at temperatures about 55.degree. C. The invention also relates to nucleic acid molecules produced by these methods, to vectors and host cells comprising these nucleic acid molecules, and to the use of such nucleic acid molecules to produce desired polypeptides. The invention also relates to methods for producing Rous Sarcoma Virus (RSV) and Avian Myeloblastosis Virus (AMV RTs or other Avian Sarcoma-Leukosis Virus (ASLV) RTs (.alpha. and/or .beta. subunits thereof), to isolated nucleic acid molecules encoding such RSV RT, AMV RT or other ASLV RT subunits, to vectors and host cells comprising these isolated nucleic acid molecules and to RSV RT, AMV RT and other ASLV RT subunits produced by these methods. The invention further relates to nucleic acid molecules encoding recombinant heterodimeric RT holoenzymes, particularly heterodimeric RSV RTs, AMV RTs or other ASLV RTs (which may be .alpha..beta. RTs, .beta..alpha. RTs, or .alpha. RTs), vectors (particularly baculovirus vectors) and host cells (particularly insect and yeast cells) comprising these nucleic acid molecules, methods for producing these heterodimeric RTs and heterodimeric RTs produced by these methods. The invention also relates to kits comprising the compositions, polypeptides, or RSV RTs, AMV RTs or other ASLV RTs of the invention.

116 Claims, 60 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 53

Full	Title	Citation	Front	Review	Classification	Date	Reference	Notes	DOI	Journal	Claims	KURC	Drawn
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3. Document ID: US 4943531 A

L11: Entry 3 of 3

File: USPT

Jul 24, 1990

US-PAT-NO: 4943531

DOCUMENT-IDENTIFIER: US 4943531 A

TITLE: Expression of enzymatically active reverse transcriptase

DATE-ISSUED: July 24, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Goff; Stephen P.	Tenafly	NJ		
Tanese; Naoko	New York	NY		
Roth; Monica J.	Bronx	NY		

US-CL-CURRENT: 435/194; 435/252.33, 435/320.1

ABSTRACT:

This invention provides a plasmid which, when introduced into a suitable host cell and grown under appropriate conditions, effects expression of a gene on the plasmid.

and production of a polypeptide having reverse transcriptase activity. The plasmid is a double-stranded DNA molecule which includes in a 5' to 3' order the following: a DNA sequence which includes an inducible promoter; a DNA sequence which includes an ATG initiation codon; the central portion of the Moloney murine leukemia virus (MuLV) pol gene, said central portion including a DNA sequence which encodes the polypeptide having reverse transcriptase activity; a DNA sequence which contains a gene associated with a selectable or identifiable phenotypic trait which is manifested when the vector is present in the host cell; and a DNA sequence which contains an origin of replication from a bacterial plasmid capable of autonomous replication in the host cell.

The invention also concerns a method for recovering purified enzymatically-active polypeptide having reverse transcriptase activity, the polypeptide being encoded by the plasmid pB6 B15.23, from a suitable host cell e.g., E. coli HB101 producing the polypeptide. Finally, the invention concerns use of the polypeptide to prepare complementary DNA (cDNA).

3 Claims, 5 Drawing figures

Exemplary Claim Number: 3

Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	K00C	Draw. S.
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Terms	Documents
(avian myeloblastosis virus adj3 reverse transcriptase or AMV RT or amv reverse transcriptase) and rna-dependent dna polymerase activity and 30000	3

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